NEW JERSEY
DEPARTMENT OF HEALTH AND SENIOR SERVICES

CONSUMER AND ENVIRONMENTAL HEALTH SERVICES

ASBESTOS ADVISORY BULLETIN

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ASBESTOS ABATEMENT AND MANAGEMENT ACTIVITIES IN NEW JERSEY SCHOOLS

This bulletin provides information regarding asbestos management programs in schools. It will assist schools that have conducted asbestos abatement, that plan to perform asbestos removal projects, or that will continue operations and maintenance activities. Retain this bulletin for reference in your asbestos management program.

SUMMARY

The New Jersey Department of Health and Senior Services-Consumer and Environmental Health Services (NJDHSS-CEHS) formerly the New Jersey Department of Health-Environmental Health Services and the federal Environmental Protection Agency-National Risk Management Research Laboratory (EPA) conducted a series of studies at 20 asbestos abatement sites in 17 New Jersey schools over a four year period. The studies documented those asbestos abatement and management activities required under the Asbestos Hazard Emergency Response Act (AHERA). They included observation and assessment of abatement projects, documentation of asbestos management plan (AMP) activities, air monitoring for asbestos concentrations and visual inspections.

The studies indicated that improperly performed asbestos removal, faulty operations and maintenance (O&M) activities, or ineffective asbestos management programs, can cause exposure to asbestos hazards. The principal conclusions are that:

- Elevated airborne asbestos levels were measured at 45% of the sites studied. These levels were caused by asbestos-containing debris remaining from abatement and O&M activities conducted by the school. Elevated levels were documented immediately following abatement, as well as from 2 to 4 years later.
- Errors in the school's AMP were found in 76% of the schools. The errors related to material identification or location. Inaccuracies in the AMP contributed to the unintentional disturbance of asbestos-containing material (ACM) at 23% of these schools.

These findings demonstrate that school officials must increase their understanding of asbestos issues and improve the oversight of asbestos abatement and management programs.

BACKGROUND

Asbestos is a mineral fiber which was used in many building materials for fireproofing, insulation, and decorative purposes, as well as in siding, shingles, and vinyl tiles. Although the mere presence of asbestos in a building is not a hazard, asbestos materials may become damaged or deteriorate over time and release asbestos fibers into the air. Breathing high levels of these fibers can result in increased risks of lung cancer, mesothelioma, and asbestosis.

The EPA and NJDHSS recommend a proactive, in-place management program whenever ACM is present in buildings. Removal is required, however, when necessary to prevent significant exposure to airborne asbestos during building demolition, renovation or maintenance. The ultimate goal of every asbestos abatement project is to eliminate, or reduce, to the extent possible, the actual or potential hazard airborne asbestos may present to building occupants.

In 1986, the EPA promulgated AHERA, which covers all K-12 grade schools and regulates the inspection, abatement, and management of ACM. In 1988, the NJDHSS and EPA began assessing the success of these programs. This bulletin contains information that is a direct result of the studies conducted under this program.

DISCUSSION

ASBESTOS ABATEMENT

The removal of ACM, when appropriate, can be an effective management practice. However, school officials must be aware that improper removal can cause elevated airborne asbestos levels. For example, if ACM is not properly cleaned up, the remaining debris can cause elevated airborne asbestos levels immediately after and/or years after the abatement activity. These studies document that 70% of abatement sites were found to contain residual debris after clearance monitoring. Some asbestos abatement contractors did not properly contain the abatement site, effectively operate the air filtration equipment, or remove all the ACM. Attention to detail in cleaning practices to assure the absence of asbestos debris was also incomplete.

CLEARANCE ACTIVITIES

The consulting firms conducting clearance air monitoring and inspections often did not fully understand and follow state and federal sampling and analytical requirements. These firms must ensure that all debris is cleaned from the abated area by conducting a thorough, standardized visual inspection. The abated area must be sufficiently dry and have good air circulation during clearance air monitoring. Consultants must follow the AHERA sampling and analytical protocols.

MANAGEMENT / O&M ACTIVITIES

AHERA requires school officials to designate a person responsible for ensuring the management of ACM. All school buildings must be inspected for the presence of ACM and a management plan developed for the control of the materials identified. Additionally, all schools must maintain and update their AMP regarding abatements, periodic surveillance and reinspection information. An alarming 76% of the schools studied had inaccuracies in the AMP relating to material identification or location. Unaware that asbestos material was present, maintenance workers performing routine activities caused elevated airborne asbestos levels in the areas where the work was performed. Records of O&M activities involving ACM must be kept up-to-date and identified in the management plan. It is the school administration's responsibility to ensure that staff and outside contractors working in the vicinity of any ACM, reference the management plan prior to performing their activities. Asbestos management programs must be carefully developed and implemented to minimize the building occupant's exposure to asbestos.

RECOMMENDED ACTION

As a result of these studies, the following actions are recommended:

- School officials and designated persons should increase their awareness and understanding of asbestos abatement and regulations. The school will be better prepared to assess asbestos abatement situations and to obtain the services they are paying for.

- Following abatement activity, school officials should work with consultants to ensure that all ACM was removed, the area was thoroughly cleaned, a standardized visual inspection was performed, and clearance air monitoring in compliance with AHERA was completed.

- School officials should evaluate the effectiveness of their O&M program and periodic surveillance. Areas that have undergone asbestos removal or an O&M activity (involving ACM) should be thoroughly reinspected for the presence of residual asbestos-containing debris. If asbestos-containing debris is found, a thorough cleaning and follow-up air monitoring should be conducted.

- Each school must maintain and update its AMP to keep it current with ongoing O&M activities, periodic surveillance, inspection/reinspection and response/post-response actions. The school should ensure that workers who may disturb asbestos-containing material are aware of changes in the AMP.

ADDITIONAL INFORMATION

If you have questions or would like additional information, contact:

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